ACROSS
2. Field of economics studying the allocation of natural resources and environmental amenities. Issues relating to externalities, common property resources, public goods, allocation of depletable natural resources over time, economic factors of environmental polarization and others.

5. Focused on firm behavior in imperfectly competitive markets.

6. Microeconomic analysis of the causes of income differences across countries.

7. The study of strategic interaction between individuals and organizations. Applications include imperfect competition, insurance markets and bargaining.

9. Strengths and weaknesses of markets and governments for solving problems of social organization or conflict, including policy response to inflation, unemployment, pollution, poverty, growth, etc. Hint: This answer has a number in it.

10. Mathematical and statistical techniques used in estimating, predicting and testing hypotheses associated with quantifiable economic relationships.

DOWN
1. Field of economics emphasizing capital markets, investment decisions, choice, capital asset pricing model, futures and options markets, efficient markets and capital structures.

3. Field of economics that relates to spatial location of economic activities and development of cities.

4. Producer, consumer and equilibrium theories; mathematical techniques of unconstrained and constrained optimization introduced and applied extensively.

6. Microeconomic analysis of the causes of income differences across countries.

7. The study of strategic interaction between individuals and organizations. Applications include imperfect competition, insurance markets and bargaining.

8. Macroeconomic aspects of money demand, money supply, the monetary transmission mechanism, central bank policy and other current issues.

9. Strengths and weaknesses of markets and governments for solving problems of social organization or conflict, including policy response to inflation, unemployment, pollution, poverty, growth, etc. Hint: This answer has a number in it.

10. Mathematical and statistical techniques used in estimating, predicting and testing hypotheses associated with quantifiable economic relationships.

Need a hint? Check out the undergraduate catalog at http://bit.ly/2bAXkVR

CHECK YOUR ANSWERS ON PAGE 36!
Only an earthquake is likely to shake the economics department out of the familiar confines of the FOB. But the comings and goings within the building never seem to slow. This year, three beloved faculty members have moved on to emeriti status: Richard Butler, James McDonald and Rulon Pope. Their profiles are highlighted in this year’s magazine. Next, after six years, Eric Eide has concluded his service as department chair. The initiation of this magazine is among his many accomplishments during those years. Finally, Carrie Todd, the department administrator for the past six and a half years, has taken on the role of full-time mother to her new baby, Madelyn. The comings include: Terri Moser as new department administrator, Emily Leslie as a new adjunct instructor and Daniel Moncayo as a visiting faculty member. We welcome all these to the Friendliest of Buildings. Many thanks to Jessica McDowell, Carrie, Terri and Eric for putting together this year’s magazine.

Sincerely,

Mark Showalter
DEPARTMENT CHAIR

CONSIDER THE 16%: WOMEN’S STORIES OF SUCCESS IN ECON
Women may be a minority in the BYU Economics Department, but that doesn’t hinder their success.

THE WORLD OF BIG DATA
What is “big data” all about and how can economists take advantage of this emerging job market?

FACULTY FAREWELLS
Reflect on the achievements of our three retiring faculty: Richard Butler, James McDonald and Rulon Pope.

FROM ECONOMICS TO ENTREPRENEURSHIP
A Q&A with David Blake, BYU Econ alum and start-up CEO.
At any given time, women make up about 16% of the BYU economics major, creating a community of women that is small, but significant; however, this small number of females in economics is not unique to BYU. According to Professor Olga Stoddard, women are underrepresented in economics departments across the country.

Though several studies have been conducted to explain why women shy away from economics, no one cause is to blame. Stoddard describes one of the explanations suggested in the literature, “Econ intro classes have historically focused on male-dominated fields: the financial markets, your traditional economic concepts that are very focused on making money or understanding the monetary policy. When we only focus on these in our introductory courses, it tends to deter women from seeing it as a field with broader implications.”

These broader implications involve a more “other-regarding” view of economics, including focuses on development and social issues. Under the direction of Professor Mark Showalter in winter 2016, Professor Turley’s class in the BYU Marriott School MPA program studied why female students at BYU are not choosing to major in economics and how to change that.

His class found that female students have two specific issues with choosing economics: They fail to see how the major could develop into a relevant career path for them, and they feel that there are not enough of “[their] people.” The class suggested a number of ways to resolve these issues—creating campaigns to increase female students’ exposure to economics and to increase a sense of belonging within economics.

Women in Economics, a division of the Economics Student Association (ESA) is another...
Emily Gillespie Blau graduated with a bachelor’s in economics in 2014 and currently works in business development at a cybersecurity company called Proofpoint. While deciding which job to take out of college, Emily was determined to have a job where she would use her economics skills every day. She explains, “I chose cybersecurity because I wanted to be in an industry that was growing rapidly and had a lot of potential for me to grow in. . . . It’s kind of the best of everything. I use economics in a growing industry.” According to Emily, employees who have the analytical skills an economics degree provides are in high demand in the technology industry. In fact, there are 10 economics graduates working just in her department.

Emily uses her modeling and statistical skills to do cost-benefit analysis of their marketing campaigns. She also works with all of the different departments in the company and implements policies to help the company run more efficiently. Her economics degree has dramatically helped her make an impact in the workplace. Early on, she had the chance to present the correlations she found to the vice president of the company. She explains, “I was able to uncover specific industries where we could spend and allocate our resources more efficiently. I was only able to show the numbers because of my econ background. That helped me get promoted really quickly, and now I have the opportunity to manage my own team.”

Emily cofounded the 2013 Women in Economics group and remains passionate about promoting economics for women. She feels that she was able to pursue an unexpected career path because Women in Economics gave her ideas of the variety of things she could do. She loves the broad applications of economics and tells female economics students, “Even though you are in a minority, being able to study economics, you’re able to apply the knowledge you gain to any aspect of your career. The study of economics is not limiting. . . . You can literally apply it to anything.”

**EMILY BLAU**

Although they may be a minority, the women who have come out of the BYU economics program have excelled in their career choices. Whether at the beginning or middle of their careers, always working or returning to the workplace after raising a family, their economics degrees have offered them both flexibility and success. The following spotlights describe the successes and experiences of a few of our female economics graduates and the opportunities that their econ degrees have afforded them.
Amanda Boren is an outstanding example of hard work and career success. She graduated from BYU with a bachelor’s in economics in 2006 and then worked in private wealth management for three years at Merrill Lynch and then Luminous Capital.

Wanting to work in the natural resources industry on complex global projects (a desire she picked up from economics), she decided to go back to school. Amanda attended Harvard Business School and received her MBA in 2011. She says that her economics degree was a good setup for getting her MBA because “[economics] helped me develop the way I approach problems and analytics.”

Getting the internship and job she wanted after graduation wasn’t easy. After a lot of cold calling (and incredible support and guidance from others), Amanda interned with Rio Tinto’s business development group in London, taking a permanent role with them after finishing her MBA. Since then, she has worked in a variety of roles at Rio Tinto, transferring among Salt Lake, London, Australia and Mozambique. She continues to work for Rio Tinto’s Iron Ore operations group and lives in Perth, Australia with her husband.

Economics has helped Amanda develop the skills necessary to make a strong impact on her workplace. She even admits that she’s used her econometrics skills at work on many occasions. She says, “My BYU economics degree opened a lot of doors, and I am particularly grateful for an incredible faculty who went above and beyond to help coach and mentor us as students.”

Even though entering a male-dominated field may intimidate some women, Amanda says it was never an issue. To all economics students, Amanda advises, “Be proactive about shaping the career that best fits your personal goals and priorities in life, evaluating trade-offs and actively making choices to reach those goals. Don’t expect it to be easy—it shouldn’t be. Success is about hard work and persistence—and a lot of help and support from a critical network of family, friends, mentors, professors and colleagues.”
Angela Olmo VanDerwerken's hard work, diligence and economics degree have opened many doors in her professional life. As she says, “Passion for the subject of economics has really spurred all my opportunities.”

Angela graduated from BYU with a bachelor's in economics in 1993 and then went on to work as an analyst at Charles River Associates in Washington, D.C. However, after five years and the birth of her first child, she decided to take some time off from a full-time career to raise her family. While devoting time to motherhood, she also assisted her husband with his consulting practice part-time.

A few years later, her family relocated to New York, and she returned to work full-time as an economist at the New York Department of Labor in the Division of Research and Statistics—a job she considers a more family-friendly fit than consulting. She spent one year at the Department of Labor, before fulfilling her lifelong dream of attending graduate school and becoming a professor. Angela is presently working on her dissertation and researching disability policy at the University at Albany, SUNY; she teaches as an adjunct professor there and at New York University.

Finally accomplishing her goal of pursuing a PhD in economics has been extremely satisfying, but the work has not been without its challenges. Beyond the load of courses and research, Angela has a lot on her plate. She is first and foremost a mother with children ranging in age from 2 to 17. To top that off, the first day of grad school, her house was destroyed by flooding from Hurricane Irene; also, her youngest child (who was born during grad school) has Down syndrome and requires some extra attention.

Taking care of her family has always been her top priority, and her economics degree has afforded her the flexibility to create a career that works with motherhood. Now in academia, Angela enjoys a lot of autonomy and command of her project choices and time, giving her the ability to devote extra time to therapy and appointments for her youngest child.

Angela’s economics degree has also provided her with a lot of successful positions. Most of her professional experience has been spent working with fellow economists, and at each stage of her career, she has stood out from her peers. “My economics degree from BYU not only helped me beat out fellow job applicants from Ivy League schools but provided me with advantageous leadership and writing skills. I was chosen to be the recruiting manager over research staff at CRA and asked to author several articles for New York State’s employment publication.” Angela was also recently awarded a prestigious research grant from Mathematica to study disability policy.

In offering advice to female economics undergrads, Angela explains, “If I were to do it again, I may not choose to delay graduate school for so long. I didn’t really believe I could handle it with young children at home, but I proved myself wrong when I had another baby after my second year of the PhD program. . . . We as women are so much more capable than we think we are, and there are many available resources and people willing to support us!”

Big data touches our lives every time we open a web page, make a purchase or send a Snap. Since late 2011, interest in big data has exploded, creating millions of jobs in the IT sector. According to LinkedIn, the top five skills that led to a new job in 2014 all had to do with data: data mining, integration software, storage systems, network and information security and search engine optimization. Furthermore, Gartner, a tech research firm, estimated that by 2015 there would be 4.4 million jobs in the data analytics industry but that only one third of these jobs would be filled. Because of their analytical training, economists are in an excellent position to take advantage of this knowledge and skills gap.

What Is "Big Data"?

Big data can best be described as datasets so large that traditional techniques and tools (e.g., Stata) are not adequate at handling them. Another good definition is given by Hadley Wickham, developer of popular visualization tool "ggplot2:" In normal statistical analysis, the development of a good model takes longer than the actual computing of the results. In the world of big data, it is the opposite. Perhaps to understand this, it would be good to understand more of how big data works. To process a regular dataset, a statistical package like Stata starts at the first row and goes throughout the database, making calculations and applying formulas. As the size of the dataset increases, Stata will get slower and slower. To get around these limitations, data scientists use a technique called parallelization. Information is spread across clusters, or tightly knit groups of computers. Then, instructions are given to members of a cluster and each node (a data point on the cluster) focuses on a different part of the dataset. For example, if I were trying to process a billion observations and had 1,000 nodes in my cluster, I would instruct the first node to handle the first million observations, the second node to handle the second million and so on. By doing this, I cut the time needed to process the data to less than one-thousandth of what would have been required.

Datasets can get so large that another dataset is needed to describe it. Such a dataset contains metadata. An example of metadata is the Harold B. Lee Library’s catalog. The entry for “Hadoop for Dummies,” does not contain the actual data within the book (words and graphs), but rather metadata—the fact that it is a book, that it contains 411 pages and that it is written in English. This is useful because the physical book does not actually need to be examined for the user to decide whether or not to check
print('Inside A Data Scientist\'s Toolbox')

for tool in toolbox:
    describe(tool)

>>> Apache Hadoop:
>>> Language: Java
>>> Released: 2011
>>> Type: Open Source
>>> Specialty: Distributed storage and processing
>>> Used by: Facebook, Yahoo, more than half of the Fortune 50
>>> Comments: The go-to option for Big Data

>>> Open Refine:
>>> Language: Java
>>> Released: 2010
>>> Type: Open Source
>>> Specialty: Data wrangling
>>> Used by: Google
>>> Comments: Data cleaning takes the longest

>>> MongoDB:
>>> Language: C++, JavaScript
>>> Released: 2010
>>> Type: Open Source
>>> Specialty: Database system
>>> Used by: Adobe, LinkedIn, eBay, Metlife, and more
>>> Comments: NoSQL

>>> R:
>>> Language: R
>>> Released: 1993
>>> Type: Open Source
>>> Specialty: Model development and data visualization
>>> Used by: Facebook, Uber, Microsoft, Twitter
>>> Comments: BYU offers classes in R

It out. In the context of big data, metadata can be useful in efficiently searching through petabytes (1,000 terabytes) of data. It can also be used in machine learning, or "teaching" a program how to recognize patterns without specific programming. For example, Netflix uses metadata to determine personal viewing preferences and to suggest new shows to watch.\(^6\)

Sometimes data are sought after and purposely created. I might need to run a survey or simulation to gather data to answer a question. However, a lot of data are created passively. The techniques that have gained popularity in response to the needs of big data (e.g., parallelization, cluster computing and machine learning) have allowed companies to leverage this data to make smarter decisions. For instance, Target was able to predict if a given woman was pregnant based on the amount of lotion and vitamins she bought, along with other purchases. The company could even estimate the child’s due date.\(^6\) Some might be concerned by this, but it shows just how powerful data can be when aggregated. In the past, Target might have hired a market research firm to conduct a focus group of pregnant women to figure out what they buy during pregnancy, but instead, Target merely has to look at the data customers generate. Data reveals preferences, and these preferences can be used for targeted advertising or to set a price closer to an individual’s true marginal willingness to pay.

**Critiques and Challenges**

The big data paradigm is not without concerns or criticisms. One such concern is that of privacy. While it is true that advances in data analysis can improve life (e.g., more data could mean better, more personalized healthcare), it can also be scary. For example, Edward Snowden\(^7\) showed that the NSA was collecting data on everything from phone calls and emails to the activities of World of Warcraft players.\(^8\)
How to Prepare:

>>> Learn how to program in languages such as Stata, Python, R and others. Learning these languages becomes easier as you progress.

>>> Stock up on econometrics. BYU offers three classes (ECON 388, 488 + 588) that give a fantastic foundation in both theory and application.

>>> Seek to do original projects that expose you to the challenges of data collection, cleaning, analysis and visualization.

>>> Take some classes in the CS department. Two basic classes that would be helpful are CS 142 and 235 (Intro to Computer Programming and Data Structures)

>>> Become a research assistant. This will give you hands-on experience with data and programming languages.

>>> Be familiar with the rapidly changing world of data.

Despite these concerns, BYU economics alum Randall Lewis, who works in big data at Netflix (and previously worked at Google), explains, “I have been pleased to see how tech companies go to great lengths to ensure customer privacy by strictly limiting employee data access for approved business purposes and avoiding recording non-business critical data in the first place.”

Another challenge of big data is that it is often difficult to judge what is actually useful. Shant Hovsepian, the Chief Technology Officer and co-founder of Arcadia Data, a company that connects businesses to Hadoop, says that the problem is not trying to find a “needle in a haystack,” but rather trying to find a “needle in a stack of needles.” There can be a lot of interesting information, but you need to “make sure you don’t prick yourself” by becoming distracted from your key objectives. Claudia Perlich, Chief Scientist at Datally, a data intelligence firm, even goes so far as to say that “99% of [what you find] is useless.” The key is to focus on specific questions that data can actually answer.

Furthermore, data is not very helpful (and can even be harmful) when it is not handled with appropriate care. Companies want to jump on the big data train, but a lack of skilled professionals has led to underwhelming results and ethical problems. These shortcomings have resulted in disillusionment in recent years; some companies have invested millions of dollars in implementing big data infrastructure which has not given any return because of poor execution. This further highlights the need companies have to hire individuals talented at using and thinking about data, As Shventank Shah, leader of the Information technology practice at Corporate Executive Board, writes, “big judgment” must complement “big data.”

Why Economists Excel

Economists have the necessary skills and the "big judgment" Shah describes. Randall Lewis is one such economist. He partners with machine learning experts, software engineers, data engineers and product managers to develop systems that blend the causal underpinning of econometrics with machine learning. He adds, "Economists can also learn big data econometric techniques which I call 'econinformatics' that cleverly combine sampling theory, model approximations, econometric theory and computational tricks to restructure the data to answer the economic question at hand. These techniques can make big data tractable."

Moreover, economists are especially good at recognizing the difference between correlation and causation. According to Lewis, “Most companies are running experiments, but they have a hard time hiring employees with the combination of computational skills and economic intuition necessary to enhance business decision-making using rigorous causal inference.”

We live in a world of big data. With wise judgment, powerful tools and the correct context, this world can be one where everyone benefits, especially those who know how to deal with the quantitative and computational demands it presents. As economists, we know how to ask and answer the right questions. We are near the ground floor and can fill the existing gap to reap economic profit. All that is necessary is some slight retraining and refocusing and a renewed appetite for data.
Having each contributed more than 30 years of research and teaching to the BYU Economics Department, Professors Rulon Pope, Richard Butler and James McDonald will certainly be missed. As a department, we thank them for their scholarship, mentorship and friendship and wish them well on their future endeavors.
Ever modest and unassuming, Professor Rulon E. Pope is quick to dismiss any praise for his successful career. However, his contributions to the fields of econometrics, theory and agricultural economics and to the BYU Economics Department have generated great admiration among his students and peers.

Rulon Pope received his bachelor’s in economics from BYU in 1971 and his PhD from the University of California, Berkeley in 1976. He worked as an assistant professor at University of California, Davis and as an associate professor at Texas A&M University before coming to BYU. During his time at BYU, Professor Pope served as Chair of the Department of Economics as well as Associate Dean for the College of Family, Home, and Social Science; though, perhaps his greatest achievements have been in research and teaching.

A FIRST-RATE RESEARCHER
Over the course of his academic career, Professor Pope has received many prestigious honors and awards for his research. Several have come from the Western Agricultural Economics Association and Agricultural & Applied Economics Association, including the Publication of Enduring Quality Research Award (AAEA) in 1992, the Quality of Research Discovery Award (AAEA) in 1997 and 2008 and the Outstanding Published Research Award (WAEA) in 1997 and 2002. He was also awarded the Warren and Wilson Dusenberry professorship from BYU in 1990.

Richard E. Just, Distinguished University Professor at the University of Maryland, has been one of Rulon Pope’s closest co-authors over the years. They met when Professor Pope was a graduate student at Berkeley, and Richard Just was a young professor and new member of the LDS Church. Professor Just explains of their relationship: “He has been not only the most enjoyable colleague and research partner of my life but also an amazing mentor for the spiritual side of my life.”

He also tells of their work together, “Our joint research has continued for 40 years and produced approximately 25 publications, including a handful that have earned national award recognition. More fundamentally, our research meetings have almost always evolved from discussions about deepening discovery of economic issues to deepening understanding and application of gospel principles in life. Rulon Pope has immensely enriched my life as an academician and, more importantly, my eternal character as a child of God.”

AN EXEMPLARY TEACHER
In 2012, Rulon Pope received the Karl G. Maeser Distinguished Faculty Lecturer award, the highest honor for faculty given by Brigham Young University. Recipients of this award must demonstrate superiority in both scholarship and teaching and are given the opportunity to present a university forum address the following spring semester. According to his students, this honor was very well-deserved.

One of his former research assistants Anthony Juliana (now a PhD student at UNC-Chapel Hill) is grateful for the things he learned and the mentorship he received from Professor Pope. In fact, it’s because of his experience working with Professor Pope that Anthony decided to pursue a PhD in economics. Beyond teaching Anthony the technical skills necessary to help with his research, Professor Pope took the time to build a relationship with Anthony, even supporting Anthony’s interests outside of economics.

AN ADMIRABLE PERSON
Anthony also appreciates the trust Professor Pope had in him. “Sometimes we got really strange results in simulations, which was oftentimes me making silly coding mistakes, but he always assumed first that the results were really weird and not that I had goofed. At times I know that I was useful for what he was working on, but at other times, I was so confused that it would have no doubt been more efficient for him to just plow ahead. But, he was very patient in explaining technical things to me and would sometimes value my progress at the expense of getting the research done quicker.”

Rulon Pope is admired by his students and colleagues for the contributions he has made to the field of agricultural economics, his patient teaching, humility, hard work, sense of humor and passion.

Professor James Cardon of the BYU Economics Department has enjoyed his interactions with Rulon Pope and looks to him as an example. “Rulon has made a deep and lasting impression on me. At one point, our research interests overlapped, and I wrote a short paper with him. The paper itself was relatively minor, but this brief collaboration with him was one of the most enjoyable and valuable of my career. BYU is a unique community of scholars and students, and Rulon is a special example of everything we aspire to be.”

Anthony Juliana admires Professor Pope’s work ethic, “He did most of his teaching by example, which I really appreciate. He works hard. He would frequently burn the midnight oil for research’s sake. I would often get emails from him late at night, long after I had left campus for the day.”

Richard Just sums up what many have encountered interacting with Rulon Pope. “Working with Rulon Pope has been one of the greatest and most cherished experiences of my academic career and entire life. . . . He brings to the table the complete package of knowledge, wisdom, thoughtfulness, reflection, humility, congeniality and persistency.”

In his free time, Professor Pope enjoys fly-fishing, church service and working on motorcycles (especially classic Spanish bikes like Bultaco). He also enjoys spending time with his family and eight grandchildren.
Fondly referred to as “Coach” by his students, Professor Richard Butler has shown through the extensive research he’s done and the many years he has dedicated to teaching that he more than earns the title.

RESEARCHER

Richard Butler graduated with a bachelor’s in economics from the University of Utah in 1973 and a PhD from the University of Chicago in 1979. After finishing his doctorate, he took a position as an assistant professor of labor economics at Cornell for three years and then completed a sabbatical before coming to BYU.

Professor John D. Worrall of Rutgers University, a colleague and mentor of Richard Butler, explains of this time, “Dick was going to take a sabbatical, so I asked him if he would come to New York and work with me for his sabbatical. I had a list of five or six topics that I was interested in, and he was interested in them as well. Over the next few years, we wrote those papers together. We were inducted together into the Risk Theory Society [an organization within the American Risk and Insurance Association that researches risk theory and management]. That started a long and productive friendship.”

After his sabbatical, Richard Butler began working at BYU. He also spent time as a C. Arthur Williams Junior Professor of Insurance at the University of Minnesota and an adjunct professor in the Department of Medical Bioinformatics at Arizona State University. In 2006, he was honored with the Martha Jane Knowlton Coray professorship from BYU.

Over the course of his career, Professor Butler has studied insurance, focusing on disability and worker’s compensation. He contributed to *Handbook of Insurance*, the book that won the 2015 Kulp-Wright Award for best book in insurance and risk management and his book *The Economics of Social Insurance and Employee Benefits* won the award in 1999.

William G. Johnson, professor of biomedical informatics at ASU, has worked and researched with Professor Butler for 30 years. He says, “I have not known anyone who is more rigorous in their approach to research nor more ethical in their dealings with colleagues and students than Dick Butler. He has been consistently generous in sharing authorship of scholarly publications with junior colleagues.”

MENTOR AND “COACH”

Furthermore, Richard Butler (AKA Coach) is a dedicated professor and mentor, always willing to help his students. Michael Tilleman, a research assistant and teaching assistant for Coach says, “I have enjoyed working with Coach because not only has he become a mentor and teacher to me, but he has become a great friend. I not only look at Coach as my boss, but as someone who has my best interests in mind.”

Professor Eric Eide of the BYU Economics Department recalls his experience with Coach when he was a student, “I took labor economics and introduction to econometrics from Dick and was able to get a sense for his energy and passion for research. I then worked for him as an RA for a year or so, and it was a pivotal experience in my education and career. At that point, I had been considering a PhD in economics but hadn’t firmly decided. I received my answer one day sitting in the computer lab writing some SAS code for a project Dick and I were working on, and I remember getting really excited about the results we were getting. That moment solidified for me my decision to pursue economics as a career. I’ll always be grateful to Dick for his support and example as a first-rate economist and mentor.”

BEYOND ACADEMIA

Along with a prolific academic career, Professor Butler has worked in a variety of other roles, from consulting for government and private sector firms to editing and refereeing journals. Richard Butler is also a member of several national associations that discuss research and solutions for insurance issues.

Professor Butler and his wife, Diane, have five sons and one daughter. Their six children have followed in the accomplished footsteps of their parents, each finding success in different ways. His eldest son, David, has written several books, and his most recent children’s adventure book, *The Kidnap Plot*, came out in June 2016 from Knopf. Matthew, his second son, is the director of the Division of Health Economics at University of Arizona. His third child, Steven, is an associate professor of mathematics at Iowa State University; he has co-authored with accomplished mathematician Paul Erdős and been given the prestigious mathematical honor of an Erdős number one. Daniel, his fourth son, is an associate professor of political science at Washington University. His fifth son, Sam, works at Ancestry.com, and his only daughter, Sara, writes speculative fiction and has a series underway named after the main character, Sonya Fletcher. Though modest about his own career achievements, Professor Butler is very proud of the accomplishments of his children.

Richard Butler’s success as a professor and researcher in the BYU Economics Department is summed up well by Professor John D. Worrall: “When Dick comes to Rutgers to work with me, he is a walking, living testimony to what the Y is trying to accomplish.”

After retiring as a professor at BYU, Richard Butler plans to continue his research full-time and get in a little backpacking through the Uintahs or deserts of southern Utah.
A sk any of Professor James McDonald’s students, and they will undoubtedly have some story to share about how he went out of his way to be kind to them. His devotion to research and the field of econometrics has made him a productive scholar, while his gift for making those around him feel important has made him an outstanding mentor and teacher.

**SCHOLAR**

Professor James McDonald graduated with a bachelor’s in mathematics in 1964 and a master’s in mathematics in 1966 from Utah State University. Funded with an NSF Fellowship, he studied at Purdue University where he earned a PhD in economics in 1970. After receiving his doctorate, he returned to his alma mater as an assistant professor of economics, and in 1972, he took a position with the BYU Economics Department.

He has worked at Brigham Young University ever since, only leaving for a sabbatical to MIT in 1980 and to serve as the mission president of the California Anaheim Mission from 1996 to 1999. Over the course of those three years, he and his wife presided over more than 700 missionaries. He served as an Associate Dean in Honors and General Education from 1993 to 1996, the Department Chair from 2000 to 2005, and was named the Clayne L. Pope Professor of Economics in 2006.

Professor McDonald has published in several premier economic journals, with more than 90 articles to his credit. Whitney Newey, professor of economics at MIT, has co-authored with Professor McDonald many times. He tells of their relationship, “Jim McDonald has been and is a superb teacher, mentor, colleague and friend. . . . I appreciate the example he sets in teaching and working with students, and I aspire to teach like him one day. It is also a privilege to do joint research with him. Our joint work has derived theory for the flexible methods he has developed, which has been fun and insightful.”

**MENTOR**

Professor Michael Ransom of the BYU Economics Department was one of Professor McDonald’s research assistants. He says, “Jim was one of the original champions of mentored learning. He has a long line—dozens—of former research assistants that have gone on to successful academic careers after studying at top tier graduate schools. I am one of those who benefitted greatly from his mentorship. I can’t tell you how much of a difference it made when the professor who was to become my dissertation advisor asked me to come see him in his office. He showed me a copy of the latest edition of *Econometrica* (one of the top journals in economics), which contained an article on which Jim was kind enough to include me as a coauthor. He asked, with some incredulity, I think, ‘Are you that Michael Ransom?’”

Likewise, Brad Larsen, now an assistant professor of economics at Stanford University, was the recipient of Professor McDonald’s generous mentorship. Over the two years Brad worked as his research assistant—and in the years since—Professor McDonald has been an avid supporter of Brad and his family. He explains, “In nearly every conversation I had with him, he somehow managed to slip in some comment that made me feel special. He let me work beside him in his office and treated me like a colleague.”

**TEACHER**

Building a sense of community in the classroom was always an important priority for Professor McDonald. During each of his 75-minute classes, he set aside a few minutes for introductions and finding common denominators among his students. Throughout the semester, he took pictures of the students and compiled them into a video to remind them of the connections they had made.

He also instilled a positive attitude toward learning econometrics in each of his students. His mantra is “Econometrics is easy. Econometrics is fun. Econometrics is your friend. And sometimes econometrics is romantic.”

Christopher Palmer, assistant professor of economics at Berkeley and one of Professor McDonald’s teaching assistants, recalls an encouraging experience he had with Professor McDonald. “A good friend of mine and econ major was recovering from cancer. She was sitting on the floor of the SWKT lobby working on some homework when Dr. McDonald walked by and noticed her. He didn’t just wave and ask how she was doing. In his white shirt and tie, he immediately slid down next to her on the floor and visited with her for a few minutes. This depth of interest and concern for individual students completely exemplifies Dr. McDonald’s approach to the classroom (and life).”

There is no doubt that his compassion, leadership and wisdom result in part from life experiences, including being diagnosed with Guillain-Barré Syndrome, a rare auto-immune syndrome that attacks the nervous system, in 2006. For Professor McDonald, this resulted in a sudden paralysis of his legs and arms that lasted more than six months and still has residual effects. On his hikes and daily walks with Professors Michael Ransom and Rulon Pope, he often reflects on the blessing of being able to walk. Along with hiking and going for walks, Professor McDonald continues to enjoy spending time with his family, teaching, reading and serving in the church. He and his wife Kathy have four children who they refer to as their “four most valuable assets.” They are also the grandparents to nine grandchildren.
Companies, graduate schools, government agencies and non-profit groups alike love BYU economics graduates. With their stellar quantitative and analytical skills, they are competitive applicants prepared for success wherever they go. However, for many students, developing those skills presents a paradox: they can’t gain experience without doing research, but they can’t get jobs—now or upon graduation—without experience.

The BYU Record Linking Lab (RLL), directed by Professor Joe Price of the BYU Economics Department, provides students—even those without previous research experience—with opportunities to develop into competent, valuable researchers by the time they graduate. At the lab, students combine external data with data from FamilySearch’s Family Tree to answer questions about income mobility, the long-term effects of state welfare programs and more.

Currently funded through external grants and alumni donations, the lab already employs more than 20 BYU undergrads. Donors like you are helping students gain valuable experience, prepare for their futures and make a contribution to the progress of the Family Tree. Please consider adding your efforts to theirs.

For information on how to contribute, visit RLL.BYU.EDU/DONATE.HTML or contact JIM CRAWLEY AT 801-422-8028
Have you ever been told the phrase to “Sleep on it before you make a decision,” or “Never shop on an empty stomach”? According to the research conducted by Professor Jaren Pope and his co-authors, Devin Pope, Meghan Busse and Jorge Silva-Risso, these suggestions might actually be sound advice. In their paper entitled, “The Psychological Effect of Weather on Car Purchases,” Pope and his co-authors analyze how much the weather impacts the type of car a potential buyer chooses to purchase. Looking at psychological biases like present bias, projection bias and salience, they work to explain consumer choices.

Using the data from over 40 million new and used car dealerships and data collected by weather stations around 200 designated market areas, they specifically analyzed the impact certain types of weather had on the sales of four-wheel-drive vehicles and convertibles. They theorized that people might mistakenly buy vehicles that they think have great utility in the moment, but may not in the long run. They predicted that buyers might overvalue convertibles in warm weather and four-wheel-drive vehicles in cold weather.

Their findings matched their predictions. They found that a 10 degree higher than normal temperature will result in a 2.7% increase in convertibles sold at each location. However, if the temperature is already high and becomes slightly higher, there is no increase in convertibles sold. On the other end of the spectrum, temperatures that are 10 degrees lower than the normal temperature will result in a .85% increase in the purchase of four-wheel-drive vehicles. Furthermore, if a snow storm drops around 10 inches of snow, there will be a 1.81% increase in the total number of four-wheel-drive cars sold over the next few weeks, even when that snow storm is at the end of the snow season.

Pope and his co-authors found that projection bias and salience can play a large role in the choices car buyers make, suggesting that behavioral biases can have significant consequences in large markets.


The medieval proverb “A bird in the hand is worth two in the bush” warns of the risk of losing something good in the chase for something better. Dating is a quintessential “bird in the hand” decision, repeated with each new suitor and continually asked from the first encounter till culmination in marriage. At each juncture, both partners must weigh their current love interest against unknown future prospects.

The search for a spouse is undoubtedly influenced by many factors, including one’s own qualities, the qualities of potential partners and expectations about future opportunities. Yet, the search process requires time, and these factors can easily change as a single person ages and thus affect his or her marriage decisions. For instance, if prospects diminish with age, singles may lower their standards over time. As a consequence, the quality of one’s spouse could depend heavily on one’s age at marriage.

In “Accounting for Age in Marital Search Decisions,” Professor Brennan Platt and Dr. S. Nuray Akin of Özyegin University examine how spouse quality (measured by education or income) changes with the age at which a person marries. Using U.S. Census data on individuals born in the 1960s, they also analyze three factors that can change as singles grow older: the quality of suitors, the frequency of meeting new suitors and the benefits of single life relative to marriage.

Platt and Akin found a striking pattern. Spouse quality peaks for women in their mid-twenties and then falls rather sharply; but, for men, the peak occurs at older ages, and the decline is more gradual. The net conclusion is that the “birds in the bush” aren’t much worse for older singles, but that they just have fewer bushes to check and less desire to do so. Younger singles benefit from a vibrant social scene; to the extent that they take advantage of it with purposeful, serious dating, they stand likely to catch a great “bird in the hand.”
SOLVING A CONFLICTING CLAIMS PROBLEM

What is a fair way to divide a resource when claims on that resource exceed the amount available? For example, how should the liquidated value of a bankrupt firm be divided amongst its creditors? Each creditor has a claim on the value of the firm, but since the firm is bankrupt, it cannot pay off all of its creditors. Some (or all) of the creditors will have to take some sort of haircut, which begs the question: “Who should get a haircut and by how much?” Solving a “conflicting claims problem” such as this is the focus of a recent paper by Professor John Stovall, “Collective rationality and monotone path division rules,” published in the Journal of Economic Theory.

A solution for a conflicting claims problem is a rule that determines how much to give to each creditor depending on the profile of claims, with the restriction that no creditor can be awarded more than their claim. Stovall does not propose one rule but rather a family of rules to solve the conflicting claims problem. In his paper, Stovall describes this family of rules in a number of different ways, but the most intuitive way to describe it is the following: A rule is a member of this family if it assigns a utility function to each creditor and then chooses the feasible allocation that maximizes the sum of all these utility functions. One prominent rule that is in this family is known as the Constrained Equal Awards (CEA) rule. The CEA rule divides by giving every creditor the same award, with the caveat that if that amount is more than a creditor’s claim, then that creditor is given their full claim.

Stovall shows that every rule in this family satisfies some basic properties. First, these rules satisfy Resource Monotonicity, which means that if the amount to be divided increases, then no creditor’s award will decrease. Second, these rules satisfy Consistency, which means that how a rule divides between two creditors will not change if all the other creditors are removed from the problem. Third, the rule satisfies Independence of Irrelevant Alternatives (IIA), the same well-known axiom used by pioneering game theorist John Nash in regards to bargaining problems. Prior to this paper, IIA had been studied in the context of conflicting claims problems by only one other author. Stovall’s main theorem shows that not only must this family of rules satisfy these three properties, but that if a rule satisfies these three properties, then it must be a member of this family.


COLLEGE ON THE CHEAP

COMMUNITY COLLEGE TUITION REDUCTIONS

About 45% of students enrolled in some form of higher education attend community college, making it clear why policy makers would be so interested in reducing the cost of community college. With Obama’s recent plan, dubbed “America’s College Promise,” students who earn good grades could receive free community college tuition.1

Though community college enrollment is now a hot topic, very little is known about “community college attendance or the long-run impacts of community college on educational attainment.”2 A close look at the price sensitivity of community college enrollment is found in Professor Jeff Denning’s paper, “College on the Cheap: Consequences of Community College Tuition Reductions.” In his research, Denning analyzes the community college system in Texas, where a portion of property taxes supports the community colleges in certain municipalities. As a result, students who live in these areas are eligible for reduced tuition. Over time, more and more regions have adopted this property tax, allowing Denning to examine the changes in community college enrollment in direct response to the tuition cut.

Denning discovered that after community college tuition decreased by $1,000, enrollment immediately increased by about 20 percent, and the greatest change from the community college price decrease was found in students who would not have enrolled in college at all. He also observed that students who were already attending a four-year institution did not generally switch to community college because of the reduced tuition; however, there was an increase in the number of students attending community college and later transferring to a four-year college to receive bachelor’s degrees.

With President Obama’s recent proposal to make community college free in America, policymakers have questioned whether that change would really make an impact on college enrollment and degrees earned. Previous research on the subject has proved that a $1,000 decrease in the cost of college tuition (two-year or four-year) increases enrollment by up to 4%.3

However, earlier studies examined grants that apply to any college and did not differentiate between two-year and four-year institutions. According to Denning’s new research, it appears that President Obama’s proposal would induce more enrollment at community colleges and the increases in enrollment would likely come from new entrants to college rather than students who were planning on attending a university.

1 http://wapo.st/1Qobnf3
2 Denning, J., “College on the Cheap: Consequences of Community College Tuition Reductions.”
Faith is Not Blind:
LIVING BY
FAITH
IN A
FALLEN
WORLD

BY CHRISTIAN VOM LEHN

PHOTOGRAPHY BY MAGGIE MILLER
One of my favorite talks to share with students is a BYU Devotional address by Bruce C. Hafen from January 1979 entitled, “Love is Not Blind: Some Thoughts for College Students on Faith and Ambiguity.” The talk addresses a challenge many of us are first exposed to in our college years. That challenge is learning to live in a fallen world full of gray areas, opposition and ambiguity while having faith in Jesus Christ and His gospel.

The causes of gray areas, opposition and ambiguity are many—the imperfections of Church leaders past and present, unexpected trials and disappointment, unfulfilled promised blessings, heavy questions and doubts about doctrine and teachings of the gospel, etc. Even something as simple as studying economics can expose us to ideas that challenge our faith. John Stuart Mill, a 19th century economist, once said, “The same persons who cry down Logic will generally warn you against [Economics]. It is unfeeling, they will tell you. It recognises unpleasant facts.” Economists think hard not only about the benefits of potential choices, but also the costs. And the dispassionate, analytical tools we teach in economics can sometimes further highlight the gray areas and imperfections of the world around us.
CHALLENGES ARE INESCAPABLE

We are constantly exposed to new doubts, ambiguities and trials, and it will be hard to remain faith-filled if our confirming experiences are not fresh. Some warn us against these unpleasant aspects of mortality, hoping we might avoid them altogether, but we cannot simply pretend they aren’t there. All of us will have to confront doubts, uncertainty and hardship in our own lives.

Consider Abraham. After escaping his father’s attempt to sacrifice him to Egyptian gods, he spent years as a wanderer, having faith in a covenant promise of a new home and an endless posterity. Though the promise of posterity was ultimately fulfilled in Isaac, Abraham died “in faith, not having received the promise” (Hebrews 11:13) of that new home. While Isaac did fulfill a promise of posterity, Abraham was tried by the Lord’s commandment to do to his son as his father almost did to him, offering him as a human sacrifice. Trials, long periods of waiting, seemingly unfulfilled promises, confusing instructions and doubts—Abraham had to deal with them all. And this cannot even compare to the Savior, “a man of sorrows” (Isaiah 53:3), tempted and tried and suffering to the point that He “descended below them all” (D&C 122:8).

FINDING & RENEWING FAITH

If we cannot avoid challenges, how can our faith coexist with a fallen world? Returning to Elder Hafen’s talk, the title alone is instructive. It comes from the English writer G. K. Chesterton, who wrote: “Love is not blind; that is the last thing that it is. Love is bound; and the more it is bound the less it is blind.” As implied in Elder Hafen’s talk and as I will use it here, this same idea applies to faith.

How can our faith thrive in our present fallen environment? We begin by remembering that true faith is bound, like Chesterton says. It is a conscious choice, a commitment, even a covenant. We may initially make these choices out of a “desire to believe” (Alma 32:27), or a “hope for a better world” (Ether 12:4). As we make these choices, we conduct an experiment where these choices can produce experiences which confirm and strengthen our faith and our commitment to it. Though we inevitably cannot remain blind to imperfections and ambiguities as we hold true to our covenants, these experiences give us confidence and encouragement to continue.
As we give Him equal time, we will find that He is bound to us, and He will give us the strength and encouragement to continue on the path of faith.

in the path of faith (even if we do not have an answer for everything we encounter).

Many have had these confirming experiences as they have taken challenges to read the Book of Mormon and to keep commandments (such as paying tithing), but having only a handful of confirming experiences is rarely enough. President Eyring once taught that "great faith has a short shelf life." We are constantly exposed to new doubts, ambiguities and trials, and it will be hard to remain faith-filled if our confirming experiences are not fresh.

GIVING THE LORD EQUAL TIME

To keep pace with the challenges we face to our faith, we will need to, as Elder Ballard has counseled, "Give the Lord equal time." I learned this through an experience I had when I first began graduate school in economics. As I started my coursework, I was amazed with how talented and capable my classmates were, and I quickly realized I would have to work very hard to keep up. This realization turned to discouragement as I saw that my commitments to the Lord, such as keeping the Sabbath Day holy, studying my scriptures, attending the temple and serving in the Church were leaving me far less time for my studies than my classmates had.

One night, feeling inadequate, I offered a prayer in which I expressed these concerns to my Heavenly Father. I openly wondered if the right answer was to temporarily reduce my level of commitment to have enough time to be successful in my studies. The answer that came to my mind was simple and unmistakable: "Remember how you came to be here." As I received this answer, I felt the Spirit helping me remember past experiences as a student at BYU when the Lord blessed me to succeed beyond my natural talents and abilities. I knew that it was only by the Lord’s help I’d come this far and that this was the path to success going forward.

So, I determined to follow that counsel and “give the Lord equal time.” It was not always easy, and there were times when my commitment was tested, but I can testify that I have been blessed in all aspects of my life, sometimes far beyond expectations, for following that counsel.

CONCLUSION

Our faith will be challenged by unpleasant facts, imperfections, ambiguities, uncertainties and trials. Yet, as John Stuart Mill ultimately concluded regarding the study of economics, we can "depend upon it that if [we] are not selfish or hardhearted already, [these things] will not make [us] so." We can remain full of faith, love and kindness as we remain bound by covenant to the Savior. As we choose to give Him equal time, we will find that He is bound to us, and He will give us the strength and encouragement to continue on the path of faith the rest of our lives and through all eternity.

1 Inaugural Address at University of St. Andrews, Feb. 1867. At the time, the common term for the field of Economics was Political Economy, which is what is used in the original speech.
2 Orthodoxy, 1959.
David Blake is the CEO and co-founder of Degreed, an e-learning company that allows individuals and organizations to track all of their formal and informal learning. He graduated with a bachelor’s in economics from BYU in 2007. He took a few minutes to discuss what it’s really like being an entrepreneur, his growing business and the personal factors that have led to his success.
Q: What would you say are skills/qualities needed to be a successful entrepreneur?
I’m not a natural-born entrepreneur. I was incredibly risk averse... Stepping out on my own was very hard. I don’t think I could have jumped in as a founder/CEO and been successful on day one. It required being part of a team, seeing others scale, getting exposure to what it takes. Perhaps one of the biggest lessons in doing that is that all start-ups are hard. They are all hard, and you experience pain. It’s the skill of knowing, “Is pain a function of the natural difficult course that is launching a company and I just need to power through it?” Or, “Is that pain a function of the fact that I haven’t yet found the right market fit or that the product isn’t working or the concept isn’t resonating?” Knowing the difference and being able to interpret that pain correctly is one of the things I attribute to why some succeed and why most fail.

Q: What exactly is your business about?
Degreed was started on the premise of two real insights. One being, we live in a knowledge economy, but we struggle to articulate what we learn and what we know. When you ask someone, “Tell me about your education,” they’ll tell you where they went to university and often skip years and decades of their lives to do so. The fact that we are learning all the time from a diversity of sources and operate in a knowledge economy but can’t answer for what we’re learning is the first insight. And the second is the fact that as lifelong learners, we learn across many islands. There’s academics, there’s professional training, there’s informal learning, there’s articles and books and podcasts and online courses. While each of those islands might have great pedagogy and might have great outcomes, there was nothing actually in the market to help me scaffold and navigate between all the learning I do. For instance, what sequence and order should I read books in and take courses between providers and islands? So Degreed was launched to be the first lifelong learning platform that helps you find, track and get recognition for all of your academic, professional and informal learning. It’s free for individuals’ use throughout their lives, and then organizations pay to use it with their organization to help see what everyone is learning and to help the organization leverage and get credit for the whole ecosystem of learning.
Q: How has your family life been affected?
In my case, immensely. When I started Degreed, I went 14 months without an income in a really expensive city. I had two kids at the time, and later the third would come. Just the strain of that is incredibly challenging and tested our relationship. It was really hard for a while with a lot of anxiety and stress.

Q: What do you do to get away from work?
Perhaps because you have to do it every day, cooking has become one of my more sustainable hobbies. I really love cooking. I've also recently picked back up rock climbing. I live in San Francisco, and there's an awesome rock climbing gym right next to the house. My family and I try to get outdoors as much as we can.

PERSONAL LIFE

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Q: Did you ever have a mentor? What mentored advice has stuck with you?
The most influential people in my career have been colleagues, in part just because of working closely with them. Beyond peer mentors and on to true “been there, done that,” under-the-wing mentorship, I grew up in my professional life under Ann Dwane. She was the CEO of the first start-up I was a part of, and she was very influential as I now have the opportunity to be a CEO. Chris Eyre is another one. He and I met on an airplane, because he had a Canadian button that we started talking about. He served as a mission president, and I served my mission in Canada. He's a venture capitalist, and I'm an entrepreneur. His mentorship has been huge in starting Degreed and beyond. There are others, but those two definitely stand out. From Ann Dwane what stuck with me is the adage, "Manage to the constraints." How quickly the constraints change is a reflection of how good of a job you’re doing at managing. That’s a paradigm and framework that’s guided the foundation of

Q: How did your business start?
Initially, my interest in education sparked when I had to take the ACT. Just the experience and the knowledge that it was sort of half of the equation in determining what university I would get into, and what university was half of the equation for what my job prospects would be, and what job I got out of school was half of the equation for my early career trajectory. It all just felt really asinine. That sparked my initial interest in education. I started studying about high stakes testing. I started studying about the model of higher education, the feast and famine model, where it came from. That led me to student debt and tuition. That snowballed into the skills gap, and it's now been a passion of mine for a long time. I believe that for all of the problems facing higher education, ultimately at the heart of all of the issues is really credentialing and accreditation and this issue of recognition of learning. So, it’s been something I have been working towards consistently through the entirety of my career.

Q: What’s the hardest part about starting out?
Scaling a business is hard work, but it’s nothing compared to the first year. When I started the company, I did it on my own without an initial co-founder. Ultimately, the challenge of scaling a business and winning in a market is tough, but the emotional journey of entrepreneurship is much more difficult.
Q: If you could tell your college student self one thing, what would it be?
For sure what I’ve learned since college is the power of having a project. Having something that you have created of your own initiative, that you own, is this golden key that unlocks so many doors. It gives you the opportunity and the reason and context to reach out to other interesting and influential people. I’ve emailed investors cold. I’ve gotten on an airplane and showed up at people’s doors unannounced and taken them to lunch, and they’ve become advisors and investors. The power of having a compelling and interesting mission and a project during high school or college unlocks opportunity. I very much had my head down during college, worked on my coursework and focused on getting the best grade.

Q: How has economics helped your career?
I think it very much gave me that foundation of being able to think at a systems level, which has been directly applicable in my career. All of the organizations I’ve been a part of, and now starting Degreed, have all been in a quest to effect system level change. The mathematical rigor is the second most beneficial part. Having that quant tool kit, which has since gotten applied in very different ways, but being well-equipped at that level has been very influential in my career.

Q: Why did you major in economics?
[After my mission], I explored education and business. As one of the business pre-reqs, I took Econ 110. Education courses at BYU were very much centered on the classroom, but for me it was never about what happens in the classroom. Even if you have a 100 percent wonderful experience in the classroom, when you step beyond the classroom, you’re facing all of these systemic issues, and that’s what my interest was in. When I took my first econ course, and sort of the study of human behavior and interactions of systems, it spoke to me more than anything else. I jumped right in and really loved the experience.

Q: How does economics help in management?
How you react in these hard moments, more than any other will ultimately define what kind of businessman you are.” That has been a north star that has guided how I frame those tough decisions and tough moments.

Interview conducted by Jessica McDowell
Do you remember the first time you used social media? Was it AOL? Friendster? Facebook? Twitter? This event probably stands out in your memory, but children born in the digital age will never know a world without social media. Over the last 12 years, social media has redefined how we communicate, how we keep up-to-date with the latest news, and how businesses and brands operate. To put things into perspective, out of 3,419,000,000 internet users in the world, 2,307,000,000 of these are active social media users.¹

But social media isn’t limited to messaging, pictures, memes and videos; it is also used for professional networking. The largest and most popular of these sites is LinkedIn, launched in 2003. Over 433 million members have used LinkedIn to build a professional identity online and stay in touch with colleagues and classmates.² On LinkedIn, you can discover professional opportunities, business deals and new ventures, as well as receive the latest news and insights applicable to your career. You can also increase traffic to your website through LinkedIn-sponsored updates and InMail (LinkedIn’s email service that allows users to message people in and outside of their networks). Today, more than 80,000 BYU alumni have created a personal profile on LinkedIn.³ They use LinkedIn to maintain relationships, find mentors and create new business and career-building connections. Networking is everything these days, and building your professional presence on LinkedIn is a key step in progressing towards a successful career.

If you already have a LinkedIn profile, you may have noticed how beneficial it can be throughout different stages of your career. Whether you’re a college student, just graduated, looking to find a new job, satisfied with your job or even retired, it plays a significant role. If you are still in college or recently graduated, you can start by connecting with classmates, friends and professors. You may be able to find jobs or internships through these connections. If you’re looking for a new job, use the connections you’ve made through LinkedIn to find potential employers. If you’re satisfied with your job, you may not think you need LinkedIn, but you can use it to mentor and help others with their career goals. If you are retired or close to retiring, LinkedIn allows you to stay on top of news in your industry as well as your other professional interests.

With social media becoming ever more popular for communicating, it’s important to start implementing it professionally, not just personally. So, take some time today to create a LinkedIn profile, update your profile, join a group or make some connections. You never know what these simple actions could do for your career.
Use a Professional Photo
You’ve heard that first impressions last forever, and your photo may be your first impression with a future employer. Be sure that your picture is professional, high-quality and of you alone. By taking this step, your profile is 14 times more likely to be viewed than a profile without a picture.4

Write a headline that stands out
In addition to your picture, your headline is the first thing that others viewing your profile will see. LinkedIn suggests highlighting what you’re doing now or what you hope to do. Consider looking at mentors’ profiles to see how they have described themselves. This description of your skills and current position can only use 120 characters, so choose your words wisely.

Continually update your profile
Keep your profile up-to-date with your most current experience. Include work experience, education, honors, awards, projects, skills and even volunteer work. Keeping your profile updated also means checking it regularly! Take just five minutes to check LinkedIn every day.

Write your story
Your profile should include your résumé, but something that will really set you apart is your story. If you go to your LinkedIn profile and click “summary” (you may have to select “view more” to see this option), you can write your story. Forbes contributor William Arruda explains that your bio (or story) is “the most powerful personal branding tool you have.”5 This is what will showcase your personality on your profile and allow employers to get to know you. You have 2,000 characters to tell stories and engage others. Keep in mind who your ideal audience is and what you want them to learn or feel. Think about your most important accomplishments, your values and passions, facts and statistics, awards and accolades and anything else you feel is necessary to tell others about you. Be genuine!

Join groups
Joining groups on LinkedIn is a great way to network and stay in contact with others in your industry. Finding a group that interests you is very simple. For example, search “economics.” Click “Groups about Economics,” and you will see 2,300+ groups for that subject. Join groups that interest you from there. After joining a group, you can send messages and share information with the rest of the group, all while making connections you may need in the future. Start by joining our group: “BYU Economics—Alumni and Student Network.” (https://www.linkedin.com/groups/5014521) to stay up-to-date on department news, to connect with former classmates and to make new connections.
ALUMNI SPOTLIGHTS
While many aspire to use their careers to make the world a better place, few are successful in identifying how to enact social change. This, however, is not the case for David Evans (1999). Since learning from his high school econ teacher that the study of economics can help the poor and disadvantaged throughout the world, David has single-mindedly set out to do just that. Through his education and research in economic development, he has consistently sought to contribute to global change.

After graduating from BYU with a bachelor’s in economics, David went on to earn a PhD in economics from Harvard. In 2005, he moved to Southern California to work for the RAND Corporation, where he did research on education. Two years later, he took a position at The World Bank Group using econometric methods to evaluate the effectiveness of education programs in Africa. He has been with The World Bank ever since, working with the Brazilian government to improve their education programs and then with African governments to provide guidance on anti-poverty programs. In July of this year, he began a one-year position helping to write a global report on “Realizing the Promise of Education for Development.”

David feels his economics degree at BYU prepared him well for his PhD program. His advanced degree has given him the analytical framework to think about returns and trade-offs. As he explains, “I work with colleagues with backgrounds in education, public health, engineering and agronomy; but, my economics degree complements their knowledge with a clear way of examining the pros and cons of alternative investments.”

Using the statistical and analytical tools he has acquired, he hopes to “alleviate suffering and allow people to flourish.” One project he worked on helped the Tanzanian government assess the value of a program that gave money to the poor. Tanzanian officials were worried the poor would become dependent on the government assistance and waste the money. Through his research, David found that the people who received the money used it for healthcare and education and invested it in assets which would help them earn more. Because of the program’s success, the government of Tanzania is now scaling it for the whole country.

He has also had the opportunity to work on widely publicized projects. “In the fall of 2014, when the Ebola epidemic in West Africa was raging, I was asked to lead a team in estimating the potential economic impacts of the virus. Our team showed that, if left unchecked, the virus could be economically devastating for the entire region, which would mean that in addition to the tragedy of disease and death that even more people would be thrust into poverty. The media took notice, and I had the chance to discuss these results widely, hopefully contributing (in a small way) to the world’s sense of urgency in reacting to the virus. While the epidemic was economically devastating in three countries, the potential spread was curbed.”

David has stayed true to his goals to help the poor and disadvantaged of the world by “first, generating high quality evidence that is relevant to policy, and second, making sure that evidence gets into the hands of policymakers.” Through his passion and analytical skills, he continues to do work that he enjoys and that has a global impact.
DEBORAH BURRIS

Balancing a career and a family is a challenging feat, but Deborah Burris (1991) attests that it can be done. Through her example as well as community outreach, she hopes to “spread the word that you do not have to be a mom OR have a career. It is possible to do both successfully.” As she says, “I am living proof of that.”

After graduating with a bachelor’s in economics from BYU, Deborah began her career at Lederle Laboratories, a pharmaceutical company now owned by Pfizer. While working there, she received an executive MBA from the Keller Graduate School of Management of DeVry University and had the opportunity to train managers throughout the western United States. However, after six years of working in pharmaceuticals, she decided to take time off to focus on her family.

Deborah dedicated her time to being a stay-at-home mother until the birth of her fourth and final child in 2003. Around the same time, her husband decided to quit his job at Intel and start a medical transcription company called Global Transcription Resources. While he handled the sales for the new company, Deborah managed the finances and operations; within 18 months, it grew to a million dollar company. As Deborah describes it, they “caught the entrepreneurial bug” and have since launched several other companies: Burris Management Company (2004), Matrix Medical Billing (2007), HybridChart LLC (2008), Automation MD, LLC (2013) and Arizona Video Studio (2014). All of their companies are still in existence and profitable.

Deborah’s economics degree has helped them grow their businesses and make the most of her limited time. She explains, “Understanding the simple concepts of opportunity cost and diminishing marginal utility have helped me make wise decisions on where to spend my time and resources, to maximize profitability in our businesses and allocate an appropriate amount of time to give service and have meaningful family time.”

“UNDERSTANDING THE SIMPLE CONCEPTS OF OPPORTUNITY COST AND DIMINISHING MARGINAL UTILITY HAVE HELPED ME MAKE WISE DECISIONS”

Leslie Koyle’s (2005) love of economics began when she took Econ 110 to satisfy a general requirement her freshman year. She explains that out of all of the general classes she took, “Econ 110 was the only class that really gripped me. My high school only offered economics of the ‘home ec’ variety, so I had never heard of this whole branch of the social science, and it was love at first sight.”

Getting to use economics every day has been an important aspect of her career. In fact, to prepare for a career in economics, Leslie took Dr. Kearl’s Econ 110 class seven different times—one for herself, once when she tutored another student and five times as a teaching assistant. The economic theories and principles she learned so thoroughly have been invaluable as she’s worked in economic consulting.

Although she originally planned to only stay for a year, until her husband graduated from BYU, Leslie’s career at Charles River Associates has lasted over 11 years. After graduating in 2005, Leslie was hired as an analyst at CRA in Salt Lake City. A year later, she was promoted to associate, and in 2012, she landed the position of consulting associate. She explains why she’s stayed with CRA, “While I love the subject matter, the reason I’ve stuck with this job for so long is the wonderful people I work with every day.”

Working at Charles River Associates has also been very conducive to her family life. Now a mother of four, Leslie has been able to continue working full-time because of the flexible, family-friendly work environment CRA provides. She is happy to be able to have a family and a career, but as she advises, “If it’s not possible to have a career and family at the same time, I wouldn’t think twice; opportunity costs are way too high to forgo a family for anything!”

Throughout her busy life as a working mother, she has learned how important it is to manage time wisely. Her advice for students and alumni reflects that: “Time is the scarcest thing in life, so be intentional about how you spend it.”
**4 Mark Boud**

Years of dedicated research and analysis of large land deals and real estate have led to Mark Boud’s (1985) successful career. In fact, he currently holds four impressive job titles: President of Real Estate Economics, Executive Vice-President of Metrostudy, Chief Economist at Hanley Wood and Chief Economist at Metrostudy.

Mark graduated with a bachelor’s in economics from BYU and has continually applied the skills and techniques he learned in his undergrad to his career. Choosing to study economics was a no-brainer for someone who loves math and analysis. He says, “I returned home from a mission in Sweden and read the very large catalog of majors from cover to cover. As soon as I read economics, it spoke to me like nothing else… I immediately enrolled in Economics 110 with Dr. Kearl.”

His first job out of college was at Alfred Gobar Associates in Orange County, California. There, he learned to apply the economic theory he studied at BYU to big land deals and real estate. After working for Alfred Gobar for four years, he decided to go off on his own as a real estate development consultant. In 1995, he formally organized his company, Real Estate Economics. As he explains, “The purpose of that company is to provide analysis for large home builders and land developers to make the best decisions.” Economics, especially modeling, has been a central part of his career. “I very much enjoy economic modeling. Years ago, I derived a model that effectively describes the supply and demand patterns of the housing market.” This model has been used by almost every public builder and land developer, including companies like Beazer Homes, CalAtlantic Homes, KB Home, William Lyon Homes, The Irvine Company and Rancho Mission Viejo.

“IT NEVER HURT ME ONCE TO BE COMPLETELY HONEST.”

In 2000, Mark launched realestateeconomics.com. His website introduced interactive resource tools to allow clients to perform their own analyses of land deals and real estate markets. The company did very well—even during the past recession. In 2014, Mark was approached by a large national real estate company called Hanley Wood. Hanley Wood and a subsidiary (Metrostudy) purchased Real Estate Economics in March 2015, enabling Real Estate Economics to address a national audience of homebuilders and land developers.

Mark has accomplished a lot throughout his distinguished career, but his advice for students and alumni is simple: “Be honest in all of your business dealings. It never hurt me once to be completely honest. Sometimes it delayed success, but the success always turned out bigger than it would have been otherwise.”

**5 Henry Tappen**

Henry Tappen’s (2010) career didn’t begin the way he thought it would. Having worked as a research assistant for several professors in the Economics Department, he expected that he would go on to graduate school in economics. However, shortly after applying to economics programs, he panicked. Worried that he might not get into the program of his dreams, he decided to send his résumé to Microsoft where he soon got a job as a program manager. He enjoyed the position so much that he ultimately chose industry over an academic career.

“PERHAPS THE MOST SURPRISING THING TO ME HAS BEEN THAT, DESPITE NOT WORKING AS AN ‘ECONOMIST,’ I STILL USE THE SKILLS I LEARNED IN ECONOMICS EVERY DAY.”

At Microsoft, Henry worked on the mobile-friendly version of Windows 8, designing infrastructure and patterns for touch apps. He stayed there for a little over three years before he decided he wanted to work with a web-based product that was more “enterprise-focused.” (Differing from a straightforward consumer product, this is a product in which the end user and the purchaser are not the same.) He found the perfect opportunity at Google and has spent the last two and a half years as a product manager on the DoubleClick Search team.

Though he didn’t choose the career route he expected, Henry has found that his education has helped him in multiple ways. He explains, “Perhaps the most surprising thing to me has been that, despite not working as an ‘economist,’ I still use the skills I learned in economics every day. . . . I’ve especially relied on the resourcefulness you learn in economics. There’s almost never an easy experiment or perfect data for figuring out a problem in economics. You can say the same thing about designing software too!”

Henry’s successful career is not a result of intellect alone; it has also come from staying humble. “I’ve been able to make better decisions and form stronger relationships by often admitting that I don’t know everything. By asking questions and sincerely listening, I’m able to build better products.” He feels that prioritizing personal and spiritual development has made him a better employee.

His advice to future economics graduates? “Stay curious, and stay passionate! Economics is all about asking why people do the things we do and how well we can predict human behavior. As an economics major, you learn the tools for researching the world.”
Knowing that he someday wanted to work in management consulting, Spencer Calvert asked himself what he could study that would be the most challenging and give him the most quantitative training. After looking into a few majors, he settled on economics. He explains, “I was pretty sure it would be more difficult than some of the other things I was pursuing, but I thought the training would be well worth it for the future.”

Over the course of his undergrad, Spencer completed not one, but four internships. He started with a non-profit on campus called the Academy for Creating Enterprise, working on microenterprise in Brazil. The following year, he worked in private equity at Sorenson Capital in Lehi, Utah, which led him to a summer internship at the Salt Lake office of Goldman Sachs. Eventually, the experience he gained through his other internships landed him a summer internship with Bain and Company in Dallas.

Though he learned many things at each of his internships, the internship that impacted him the most was at Goldman Sachs. He explains, “It was my first internship at a large program, and I had to learn a level of professionalism that I hadn’t known before. I learned to double and triple check my work, even if it was for something as simple as a phone call, to use everyone’s time effectively.”

Beyond his internships, Spencer participated in many extracurricular activities. He was a member of BYU Men’s chorus, the editor-in-chief of the Marriott Student Review, a TA and RA for several professors in the business school and vice-president of the Management Consulting Club. Spencer is also married and the father of identical twin boys.

Spencer has accepted a job offer as a business analyst with McKinsey & Company in their Seattle office. He explains, “What really stood out to employers when I was going through the hiring process was my internship experience. It showed that I am hire-able and that I work well with others. So, ultimately, they just had to ask if I was a good fit for the firm.” Clearly, his hard work, extracurricular and internship experiences have paid off.

“I was pretty sure [econ] would be more difficult than other things I was pursuing, but I thought the training would be well worth it for the future.”
NATHÁLIA MYRRHA

After her brother, a BYU economics alum, suggested that she major in economics, Nathália Myrrha was adamant about studying nearly anything else. She eventually settled on international relations, which still required Econ 110. As she explains, “When I took Econ 110, I realized I loved learning this stuff! And even though some concepts didn’t come easily to me, it was probably what I wanted to do.”

Because of that “aha” moment, she took Professor Stoddard’s economic development class and fell in love with the subject. With guidance from Professor Stoddard, Nathália realized economics would equip her with more skills and opportunities than other majors she was considering, which influenced her to pursue econ as her major with an international development minor.

Nathália’s undergrad experience has been full of internships, research and valuable employment opportunities. During her sophomore year she began an internship through the Ballard Center and worked with the Perpetual Education Fund (PEF) on a microfinance project which turned into a paid summer internship.

Following that internship, she worked for the WomanStats Project at BYU—the largest compilation of data on women in the world. Nathália coded periodic reports, articles and law pieces into over 300 variables covering women’s issues throughout the world. This job gave her the chance to represent the project at the United Nations’ Commission on the Status of Women in New York City. From this experience, she says, “WomanStats has given me empathy for women who live in circumstances of poverty and disenfranchisement throughout the world. It has also influenced my beliefs on my role in the home, in society and in the world.”

Nathália also worked as a research assistant for Professor Price of the BYU Economics Department, helping to predict change in behavior for individuals enrolled in the government WIC program and gathering data for the prejudice and slavery project. She was a teaching assistant for the economic decision making and behavioral design classes, taught by Professor Turley in BYU’s MPA program. Each of her work experiences taught her a variety of skills, from how to manage a team to how to take initiative and work independently.

Nathália now works as a corporate finance analyst at HanesBrands, developing capital structure models, evaluating debt and interest expense, and assisting with financing plans for Hanes’ acquisition strategy.

NICK HALES

There’s a common story among econ grads, and Nick Hales is no different. He never planned to major in economics, but after experimenting with different majors, he realized the class he enjoyed the most was Econ 110. Since settling on economics as his major, Nick has seized many opportunities in the program—from being a TA for 378, 388 and 488 to researching for Professor Arden Pope—culminating his academic career as the department’s valedictorian for April 2016 graduation. Beyond academics, Nick mentions that a fun highlight for him was playing against the economics faculty in last year’s faculty vs. students March Madness basketball game.

In addition to his on-campus activities, Nick also interned at Cornerstone Research where he experienced the real-world applications of what he had learned in class as well as the invaluable skills he gained from being an RA and TA.

“Working as a research assistant was huge, because attention to detail became really important. Mistakes could be very costly to a project, and I think that’s really important in litigation consulting.”

Determining what to do after graduation was difficult for Nick, but he eventually accepted a job offer from Cornerstone. He explains, “I thought about getting a PhD for a long time, and I still think it would be fun. I was really on the fence about it up until the week before I went with Cornerstone. At the end of the day, I decided I like teaching more than research. Working in economic consulting still leaves a lot of doors open, so I can go and do something else or get a PhD later.”

Despite his successes, Nick said he was genuinely surprised and humbled to be chosen as valedictorian. “I think there are a lot of super, super bright people here who could easily be valedictorian. . . . I’m just really grateful to be at BYU. I interned with three students from Stanford, and I felt my education at BYU put me on the same plane as them. I have an overwhelming sense of gratitude to have been taught by really stellar professors who also have a testimony of the gospel. I got a world-class education for a bargain and from fantastic people who love their work.”
All results based on the survey responses of 74 out of 183 graduating students of the 2015-2016 economics class.

72% plan to work after graduation
77% accepted offers
81% received full-time job offers

Job Industries:
- Academia
- Banking
- Business
- Consulting
- Education
- Federal Reserve
- Finance
- Healthcare
- Non-profit
- Technology
- Other

Companies:
Adobe Systems
Amazon
American Airlines
American Logistics Company
Axiom Property Management
Bain & Company
BambooHR
Board of Governors of the Federal Reserve System
CapitalSource
Charles River Associates
Concept Hunter
Cornerstone Research
Dell EMC
Dodge & Cox
Dwelo
Epic
Google
InsideSales.com
Instructure
J.P. Morgan
KPMG
McKinsey & Company
Morgan Stanley
Mozenda
Power Watch, LLC
PwC
Regence BlueCross BlueShield
Sears Holdings
Select Portfolio Servicing
TOP FIVE

favorite classes
413R Behavioral Economics
388 Econometrics
440 Natural Resources & Environment
110 Economic Principles & Problems
461 Economics of Education

hardest classes
388 Econometrics
378 Statistics for Economists
488 Applied Econometrics
580 Advanced Price Theory (Micro)
588 Advanced Econometrics

INTERNSHIPS

48 / 72 have completed an internship

2 / 72 will complete one after graduation

GRADUATE PROGRAMS

of the 36% who have been accepted

Dental
Econ PhD
Econ MS
Finance PhD
Law
MAcc
MPP
Statistics PhD

SCHOOLS

Arizona State University
Barcelona School of Economics
Boston College
Brigham Young University
Columbia University
Cornell University
Massachusetts Inst. of Technology
New England School of Law
Northwestern University
Ohio State University
Pennsylvania State University
Rice University
Shanghai Jiaotong University
Texas A&M University
Univ. of California, Berkeley
Univ. of California, San Diego
Univ. of Maryland, College Park
University of Michigan
University of Texas at Austin
University of Utah
University of Virginia
Vanderbilt University
After Emily Leslie graduated with a bachelor’s in economics from BYU, she and her husband both started graduate programs at The University of Iowa. During the last five years of graduate school, they have had three children. She just finished her fifth year and will graduate in December 2016.

Leslie was born and raised in Iowa City, Iowa, which is where The University of Iowa is located. She says, “I never expected to have the chance to move back after leaving for college, but it was wonderful to have a few more years there.” She enjoys reading, spending time outdoors, cooking and eating.

Her research specialty is applied microeconomics, and she is especially interested in topics that relate to the poor and disadvantaged. She is teaching Econ 378 (Statistics for Economists) this fall.

Leslie is excited to return to BYU because of the people she gets to associate with, both faculty and students. “I always find that the BYU econ faculty challenge me to make my work better and support me in my goals and priorities. I was impressed by how bright and good my classmates were when I was an undergraduate, and I’m sure my students will be just as excellent.”

Daniel Moncayo graduated with a degree in history and economics from BYU-Idaho in 2009 and recently finished his PhD in economics from the University of California-Santa Barbara. During his graduate studies, he spent time as a Visiting Research Fellow at the Federal Reserve Banks of Kansas City and Chicago. He was also a Research Fellow at the Federal Reserve Board.

Moncayo grew up in Quito, the capital city of Ecuador. He is the father of three and enjoys playing with his kids and running around the backyard. He loves cars and motor racing, and now that he’s finished with his doctorate, he hopes to do more of that.

His research focus is on public economics, and his current work explores how tax loopholes affect the design of optimal income taxes. This past summer, Daniel taught Econ 475 (Public Economics), and he will continue to teach it during this fall semester along with Econ 381 (Intermediate Macroeconomics).

He is excited about the opportunity to teach at BYU. “Working in the Economics Department at BYU is the best of two worlds: I get to work with an excellent group of economists and researchers while at the same time contribute to the growth and progress of the Church. I am excited about new experiences and the chance to teach motivated students.”
GRADUATE STUDENT CONFERENCE
On June 9th–10th of this year, graduate students pursuing a PhD in economics were invited back to BYU for the second biennial BYU Graduate Student Conference. Fifteen graduate students from 10 universities across the country came and presented their current research. The conference gave these students the opportunity to receive early feedback from professors and collaborate and network with their peers. This year, BYU economics undergraduates were also invited to a breakfast to meet with the PhD students and ask them questions regarding the graduate school experience.

NEW VISITING ASSISTANT PROFESSOR
Jocelyn Wikle, formerly an adjunct assistant professor, has been hired as a visiting assistant professor beginning fall 2016. She will continue teaching Econ 381 (Intermediate Macroeconomics) and will also teach Econ 388 (Introduction to Econometrics). Selective, mid-tier and low-tier colleges, which majors rely on a prestigious university for higher earnings, and how this information impacts prospective students and their parents. The article and interview are available with subscription at http://on.wsj.com/1Q72yTO. You can also read the full study in Contemporary Economic Policy, Volume 34, Issue 1, 37-46.

WALL STREET JOURNAL
Earlier this year, the Wall Street Journal asked Professor Eric Eide and his co-author Dr. Michael J. Hilmer of San Diego State University to write an article for the WSJ Wealth Report. The article explained their findings from the paper “Is it where you go or what you study? The relative influence of college selectivity and college major earnings” also co-authored by Professor Mark Showalter. The WSJ interviewed Dr. Eide about the average earnings of students who attend selective, mid-tier and low-tier colleges, which majors rely on a prestigious university for higher earnings, and how this information impacts prospective students and their parents. The article and interview are available with subscription at http://on.wsj.com/1Q72yTO. You can also read the full study in Contemporary Economic Policy, Volume 34, Issue 1, 37-46.

ECON OFFICE GETS A FACELIFT
Have you seen the remodeled Economics Department office? During summer 2015, the Economics Department office was completely reconfigured and renovated, meaning it’s no longer a maze to drop off your homework or talk to the secretaries or department chair. Next time you’re on campus, come check out the changes (130 FOB).